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LONE STAR INDUSTRIES, INC.
SEATTLE WASHINGTON
CEMENT PLANT

The Seattle cement plant, originally built in 1929, is located on a 24-acre site in a heavy industrial area of the east waterway of the Duwamish River, 2 miles south of Elliot Bay and Puget Sound. The area is served by rail as well as barge, and there is good truck access via East Marginal Way and connecting highways.

The Seattle cement plant is a coal-fired wet process operation with an annual clinker capacity of 206,000 tons per year. In 1969, a major addition to the plant replaced the old finish grinding capacity with new capacity of 750,000 tons per year, and added 37,600 tons to cement storage capacity and 20,000 tons of clinker storage capacity. All raw materials are purchased and delivered to the plant site. The limestone is obtained from Texada Island, British Columbia, under an agreement with Canada Cement Lafarge. Proven reserves on Texada Island are extensive. The plant employs a total of 115 people, 22 salary and 93 hourly. Clinker is purchased from outside sources to increase cement production.

The major cement plant buildings include the office, two storage buildings, machine shop, warehouse, and washhouse. Other structures are the wharf, raw mill building, burner building, clinker storage building, clinker and gypsum storage silos, finish mill building, cement silos, and the baghouse and packhouse.

The process systems consist of:

1	-	Barge unloading system
1	-	13-ton hammerhead crane
1	-	cone crusher - 150 horsepower
3	-	7-foot diameter by 45-foot raw mills - 750 horsepower
6	-	540-ton slurry mix tanks
1	-	648-ton kiln feed basin
2	-	11-foot diameter by 240-foot kilns
1	-	210,000 CFM electrostatic precipitator
2	-	9-foot diameter by 90-foot rotary coolers - 40 horsepower
2	-	coal mills - 125 horsepower
1	-	7-foot diameter by 45-foot finish mill - 750 horsepower
2	-	12-foot diameter by 36-foot finish mills - 2,500 horsepower
4	-	6 foot 6 inch by 17 foot 7 inch cement coolers
1	-	1,316-ton bulk loading system
3	-	packing machines

Other equipment items included with the process systems are belt conveyors, screw conveyors, bucket elevators, hoppers, bins, compressors, pumps, vibrating feeders, weighfeeders, air slides, screens, bridge cranes, agitators, air separators, dust collectors, fans, and scales. Other machinery and equipment includes mobile equipment, shop equipment, general plant equipment, laboratory equipment, and office furniture and equipment.

PORTLAND CEMENT TERMINAL

The Portland cement terminal, which was built in 1967 and doubled its capacity in 1973, is located on a 3.8-acre site on deep water on the Willamette River at 240 S.E. Caruthers Street, Portland, Oregon.

Cement is shipped by rail from the Seattle cement plant to the terminal, stored in two 1,000-ton silos, and loaded into trucks for distribution to various ready-mix concrete plants located in the area.

Located at this site are the following:

	Railroad spur and paving
Buildings	60-foot by 80-foot trussed roof warehouse 24-foot by 48-foot railcar unloading shed 15-foot by 15-foot elevated office and control 15-foot by 15-foot compressor building
Machinery and Equipment	
Railcar Unloading System	One 450-cubic-foot blow tank One 325-CFM air slide blower - 5 horsepower 995-CFM air compressor - 150 horsepower One railcar puller - 10 horsepower Three snatch blocks Two railcar vibrators One air dryer
Cement Storage System	One 1,000-ton 2-foot diameter single-compartment silo One 1,000-ton 2-foot diameter four-compartment silo Two 37-bag dust collectors with 2,236-CFM exhaust fan - 5 horsepower One air slide blower - 1 horsepower
Truck-Loading System	One 4-foot by 8-foot vibrating screen One 25-foot-bag dust collector with 865-CFM exhaust fan - 2 horsepower